

Mint of the United States
AT PHILADELPHIA.April 18th 1879Hon A. Loudon Snowden
Superintendent

Sir:

I have the honor to submit herewith a plan for an alteration in the Roll Grinding Machine, substituting an Emery wheel of seven and one half ($7\frac{1}{2}$) inches diameter in place of the forty eight (48) inch stone now in use. This improvement is suggested by Mr Samuel James, foreman of the Machine Shop, and is the result of much deliberation not only upon his part, but also of Mr W. H. Webb who for a long time had the care of the Rolls, and of Mr Geo F. Forney who is at present in charge of them. There are several

reasons

reasons why the use of an emery wheel is preferable to the present arrangement.

In the first place, it would economize time. — The average time consumed in grinding one pair of rolls with the stone is fully one day. It is claimed that the emery wheel will do the same work in one half, and perhaps in one third ($\frac{1}{3}$) the time.

Again, by using an emery wheel the rolls can be removed from their housings, ground and replaced, ready for use in less time than a pair already ground can be adjusted, as there need be no time or material wasted in the fitting of boxes.

Then the alteration proposed will economize space, a very desirable result, as the crowded condition of the Mint building fully demonstrates, and will afford more light. — The space now covered is three hundred

Mint of the United States

AT PHILADELPHIA.

187

Hundred (1200) Square inches - the new arrangement will cover an area of but three hundred and twenty five (325) Square inches. The large stone wheel stands between the window admitting the light, and the roll. - by removing it there will be no obstruction in the way, and the workman can see better to do his work.

To make these alterations will require the casting and fitting up of a frame to take the place of the one holding the stone - the making and fitting of a spindle and frame for the emery wheel - the casting and fitting of a rest for the screw of the slide rest, and alterations to shaft to obtain the required speed.

I have examined this proposed improvement

4. March 18

improvement, and feel satisfied that it
will accomplish all that is claimed for it,
and trust it may meet with your approval.

Should it do so, I would respectfully
suggest that the emay wheels, Spindle and
frame be made by Messrs Morton & Co
of Wilmington Del, as that firm man-
ufacture the best wheels, and have kindly
presented the Mint with two emay wheels
that have worked most satisfactorily -

The other work necessary to be done,
can be accomplished by any city shop.

Very Respectfully
Your Obedient Servt
O. C. Bradley
Coiner

174 1/2

Philada

April 18/79

O.C. Bosbyshell

To A. L. Swinden

Relative to an improvement
in the machine for
grinding rolls. An
Emery wheel to be
substituted for the
grind, time.

Recd Apr 18/79

[Abstract:] Relative to an improvement in the machine for grinding rolls... 174 1/2

Coiner's Department.

Mint of the United States
At Philadelphia.
April 18, 1879

Hon. A. Loudon Snowden
Superintendent

Sir:

I have the honor to submit herewith a plan for an alteration in the Roll Grinding Machine, substituting an Emery Wheel of Seven and one half (7 1/2) inches diameter in place of the forty eight (48) inch stone now in use. This improvement is suggested by Mr. Samuel James, foreman of the Machine Shop, and is the result of much deliberation not only upon his part, but also of Mr. H.H. Webb who for a long time had the care of the Rolls, and of Mr. Geo. F. Forney who is at present in charge of them. There are several reasons why the use of an emery wheel is preferable to the present arrangement.

In the first place, it would economize time. The average time consumed in grinding one pair of rolls with the stone is fully one day. It is claimed that the emery wheel will do the same work in one half, and perhaps in one third (1/3) the time.

Again, by using an emery wheel the Rolls can be removed from their housings, ground and replaced, ready for use in less time than a pair already ground can be adjusted, as there need be no time or material wasted in the fitting of boxes.

Then the alteration proposed will economize space, a very desirable result, as the crowded condition of the Mint building fully demonstrates, and will afford more light. The space now covered is Twelve hundred (1200) square inches – the new arrangement will cover an area of but three hundred and twenty five (325) Square inches. The large stone wheel stands between the window admitting the light, and the roll – by removing it there will be no obstruction in the way, and the workmen can see better to do his work.

To make their alterations will require the casting and fitting up of a frame to take the place of the one holding the stone – the making and fitting of a spindle and frame for the emery wheel – the casting and fitting of a rest for the screw of the slide rest, and alterations to shaft to obtain the required speed.

I have examined this proposed improvement, and feel satisfied that it will accomplish all that is claimed for it, and trust it may meet with your approval.

Should it do so, I would respectfully suggest that the emery wheel, spindle and frame be made by Mess. Morton Poole & Co. of Wilmington Del., as that firm manufacture the best

wheels, and have kindly presented the Mint with two emery wheels that have worked most satisfactorily.

The other work necessary to be done, can be accomplished by any city shop.

Very Respectfully,
Your Obt. Servant
O.C. Bosbyshell
Coiner.